

What is claimed is:

1. A material comprising the reactive product of an A-side comprising a prepolymer isocyanate and a B-side comprising a first vegetable oil comprising a multi-functional alcohol and a catalyst.
2. The material of claim 1 further comprising a blowing agent.
3. The material of claim 1, wherein the prepolymer isocyanate comprises the reaction product of an isocyanate and a second vegetable oil.
4. The material of claim 3, wherein the first vegetable oil and the second vegetable oil are a vegetable oil chosen from the group comprising soy oil, rapeseed, cottonseed oil, and palm oil.
5. The material of claim 4, wherein the first vegetable oil and the second vegetable oil comprise blown soy oil.
6. The material of claim 1, wherein the catalyst comprises a tertiary amine.
7. The material of claim 1, wherein the multi-functional alcohol is present in a ratio to the second vegetable oil such that there are at least 0.7 moles of hydroxyl (OH) groups per mole of the second vegetable oil.
8. The material of claim 3, wherein the isocyanate comprises diphenylmethane diisocyanate (MDI).
9. The material of claim 1, wherein the B-side further comprises a polyol derived from petroleum.

10. The material of claim 9, wherein the polyol derived from petroleum comprises a polyurea polyol.
11. A method of preparing a material comprising the step of combining an A-side comprising a prepolymer isocyanate and a B-side comprising a first vegetable oil, a cross-linking agent comprised of a multi-functional alcohol, a catalyst, and a blowing agent.
12. The method of claim 11, wherein the prepolymer isocyanate comprises the reaction product of an isocyanate and a second vegetable oil.
13. The method of claim 12, wherein the first vegetable oil and the second vegetable oil are a vegetable oil chosen from the group comprising soy oil, rapeseed oil, cottonseed oil, and palm oil.
14. The method of claim 12, wherein the first vegetable oil and the second vegetable oil comprise blown soy oil.
15. The method of claim 11, wherein the catalyst comprises a tertiary amine.
16. The method of claim 11, wherein the multi-functional alcohol is present in a ratio to the second vegetable oil such that there are at least 0.7 moles of hydroxyl (OH) groups per mole of the second vegetable oil.
17. The method of claim 12, wherein the isocyanate comprises diphenylmethane diisocyanate (MDI).
18. The method of claim 11, wherein the B-side further comprises a polyol derived from petroleum.

19. The method of claim 18, wherein the polyol derived from petroleum comprises a polyurea polyol.
20. A method of preparing a material comprising the steps of combining an A-side comprising a prepolymer isocyanate with a B-side comprising a first vegetable oil, a cross-linking agent comprised of a multi-functional alcohol, and a catalyst.
21. The method of claim 20, wherein the prepolymer isocyanate comprises the reaction product of an isocyanate and a second vegetable oil.
22. The method of claim 21, wherein the catalyst comprises a tertiary amine.
23. The method of claim 21, wherein the multi-functional alcohol is present in a ratio to the second vegetable oil such that there are at least 0.7 moles of hydroxyl (OH) groups per mole of the second vegetable oil.
24. The method of claim 21, wherein the B-side further comprises a polyol derived from petroleum.
25. The method of claim 24, wherein the polyol derived from petroleum comprises a polyurea polyol.
26. The method of claim 21, wherein the first vegetable oil and the second vegetable oil are a vegetable oil chosen from the group comprising soy oil, rapeseed oil, cottonseed oil, and palm oil.
27. The method of claim 26, wherein the first vegetable oil and the second vegetable oil comprise blown soy oil.
28. The method of claim 20, wherein the catalyst comprises a tertiary amine.

29. The method of claim 20, wherein the multi-functional alcohol is present in a ratio to the second vegetable oil such that there are at least 0.7 moles of hydroxyl (OH) groups per mole of the second vegetable oil.

30. The method of claim 20, wherein the B-side further comprises a polyol derived from petroleum.

31. The method of claim 30, wherein the polyol derived from petroleum comprises a polyurea polyol.